GROSS (L.)

Spasmodic Stricture of the Oesophagus xx

[Reprinted from THE PHILADELPHIA MONTHLY MEDICAL JOURNAL, September, 1899.]

SPASMODIC STRICTURE OF THE ESOPHAGUS, WITH A REPORT OF A CASE OF UNUSUAL DURATION.

BY LOUIS GROSS, M.D.,
of San Francisco, Cal.

SPASMODIC stricture of the esophagus, or esophagismus, is a condition which may be described as a clonic, spastic contraction of the muscular coat of the esophagus, usually of hysteric or hypochondriac origin, or from reflex stimuli.

This affection, in its lighter forms, is comparatively frequent; in fact, the so-called "globus hystericus," a common stigma of hysteria, is naught else but a spasmodic contraction of the muscles of the esophagus, although this involvement of the musculature of the esophagus is, as a rule, unattended by any difficulty in deglutition.

Spasm of the esophagus may be a mere psychic or hysteric phenomenon; it may occur in the course of certain nervous disorders, such as epilepsy, chorea, and especially hydrophobia; or it may result from the strain of violent retching. Of the psychic causation, the most striking example is to be seen in the case of patients who imagine they are suffering from hydrophobia. Then, again, it may come on in hysteric individuals without any demonstrable cause. In tetanus and epilepsy, the esophagus sometimes participates in the spasm which affects so many of the other somatic muscular structures. In chorea, spasm of the gullet is less frequent. In true hydrophobia, the muscles of the pharynx and esophagus are specially involved.

Among the reflex causes acting at a distance, diseases of the stomach and affections of the uterus may be mentioned. Howship[1] records a case in which a

man was treated with bougies for four months, on account of stricture of the middle third of the esophagus. After death, no stricture was found, but the stomach was in a state of fungous ulceration. Shaw[2] also reports a case, in which he had treated a patient for organic stricture of the esophagus. After death, the dysphagia was found to have been caused by ulceration of the larynx. Mackenzie[3] had two patients, who always suffered from esophageal spasm, when pregnant, but were relieved immediately after parturition.

The affection consists essentially of a spasm of the circular fibers of the esophageal muscle. The more frequent occurrence at the extremities of the tube is explained by the greater abundance and higher development of the circular fibers in those situations.

It is found in connection with hysteric and other nervous disorders from the fact that there is, doubtless, a perverted condition of the nervous centers necessary for its production. Morbid changes of structure have not hitherto been observed.

In diagnosis, the first essential is to demonstrate that we are really dealing with a purely functional affection. Here we must remember that the sudden onset of the attack, its occurrence in a neurotic subject, and the use of the esophageal sound make, as a rule, the diagnosis easy. It is, however, with the use of the sound that the greatest accuracy in diagnosis is attained, sometimes a single introduction affecting a cure. In spasmodic stricture one can by gentle, careful, persistent pressure cause the spasm to give way and reveal its true nature; yet there are cases which require complete anesthetization before we are able to say positively that we are dealing with a stricture of spasmodic and not organic origin. In paralysis of the gullet, the dysphagia is constant, while in malignant disease it is nearly always progressive.

The symptoms of stricture of the gullet are quite distinct. There is inability to swallow ordinary food and in extreme cases even liquids are rejected. In some slight and recent cases solids and semisolids are swallowed more easily than liquids, but as the disease becomes more advanced warm drinks can be

taken with less trouble than cold ones. The dysphagia may be paroxysmal, occasionally coming on in the middle of a meal. Sometimes the patient expresses the well-known feeling of a "ball rising in the throat." Hamburger[4] believes that "globus hystericus" consists in a wave of spasm affecting successive segments of the gullet from below upwards.

Regurgitation, when it occurs, comes on instantaneously with every attempt to take food. If the regurgitated matter be of alkaline reaction, the indication is that it has not reached the stomach. Pain is a symptom of slight practical value. It may or may not be present.

Auscultation often affords valuable information. Thus the point of obstruction may vary in situation. The first morsel may be arrested or retarded at the upper part of the esophagus, while the second or third morsel is stopped two or three inches lower down; or while the act of deglutition is arrested or delayed one moment it may be performed perfectly the next. This is an absolute proof of the spasmodic character of the affection.

The prognosis is usually favorable, especially in recent cases, although if of very long standing, like many other nervous affections, it becomes intractable. Mackenzie[3] thinks it may lead to narrowing of the esophagus and thus predispose to carcinomatous development. Even when the disease is of only moderately long duration, the cure is often protracted and relapses are apt to occur.

Cases of unconquerable spasm of the gullet have ended in death, but they are very rare. In fact, in these cases, on postmortem examination, no disease could be found. Power[5] has related an instance of death from inanition following esophagismus, and yet after death no organic lesion whatever, in or around the gullet, could be detected. Hamburger[4] thinks, from the few cases he has examined, that esophagismus is a forerunner of carcinoma.

The following case is cited as an example of esophagismus of long standing:

Mrs. B., aged 55, previous health excellent. She awakened one morning in a state of profuse perspiration and demanded her usual breakfast, consisting of a cup of coffee and two slices of toast, which she was able to swallow without difficulty. Three hours later, on attempting to swallow a glass of water, she found to her consternation she was not able to do so. Dr. Albert Abrams, of this city, was summoned to the case in consultation, and the following objective signs were obtained. Edema of the glottis, dyspnea, and absolute dysphagia. There was hemianesthesia on the left side of the body, with hemiparesis. For 36 hours, the patient was unable to swallow anything. At the end of this time, finding that the spasm of the esophagus did not yield, food was introduced into the stomach by means of the stomach-tube. The procedure was persisted in for 5 weeks—the actual duration of the esophageal spasm. During the second week, in order to more thoroughly confirm the diagnosis, the patient was anesthetized. It resulted in a complete removal of the stricture. On coming out of the anesthetic, her voice was less husky. The patient was then referred to Dr. Wilber M. Swett, of this city, for laryngologic examination, the report of which is herewith appended.

April 21, 1899.—Examination. Entire immobility of the right half of the larynx and vocal cords. Some secretion in the rima glottidis, and the part is anesthetic. Velum palati anesthetic. Considerable difficulty in swallowing saliva.

April 24, 1899.—In phonation, the right cord fails to approximate the left. Left moves perfectly. Case appears to be one of hysteria. Electric massage applied, also electricity to the larynx externally.

April 25, 1899.—Two applications to the larynx did not affect the patient. Laryngeal reflexes absent. Optic disc normal.

April 26, 1899.—Electric massage continued.

R. V. = $\frac{20}{50}$ L. V. = $\frac{20}{70}$

+ 2.5 Rt. and Left = $\frac{20}{30}$

+ 4.0 Rt. and Left Snell 2.

Larynx moves much better, and the right cord approximates, leaving only a small central chink.

May 4, 1899.—Considerable improvement in the voice and mobility of the right cord, and is able to swallow a little hard food. Patient went to the country.

July 20, 1899.—Patient returned. Right half of larynx moves slightly. Left half and cord have excessive motion, and taking up the loss of the right side, thus giving a fair voice.

The patient left for the country, during which time, a period of 4 weeks, the spasm gradually subsided, so that she was able to take food of any kind. She is now perfectly well, as far as her dysphagia is concerned, only there still remains a slight hoarseness.

The treatment consisted in a daily introduction of the sound, the intraesophageal application of electricity, electric massage externally, the use of cold water in its manifold applications, the bromids through

the stomach-tube to their physiologic effect, viz., abolition of the palatal reflexes and the ataxic gait. Hypnotism, recommended so highly by Brothers,[6] was employed without any effect. The application of a refrigerating spray to the superior laryngeal nerves at their entrance into the larynx alone succeeded in effecting a cure. The effect of the cold may have been purely psychical.

BIBLIOGRAPHY.

1 "Practical Remarks on Indigestion," London, 1825.
2 *London Medical and Physical Journal*, vol. 48, p. 185.
3 "Esophagus, Nose, and Naso-pharynx," 1884.
4 "Klinik der Esophagus Krankheiten, Erlangen, 4. art, p. 494.
5 *Lancet*, 1866, vol. 1, p. 252.
6 Brothers (S.): "Hypnotism and Suggestion, with a Case of Spasmodic Stricture of the Esophagus,' *Medical Record*, New York, August 29, 1896.

764 Geary Street,
San Francisco, Cal.